FIG. 1

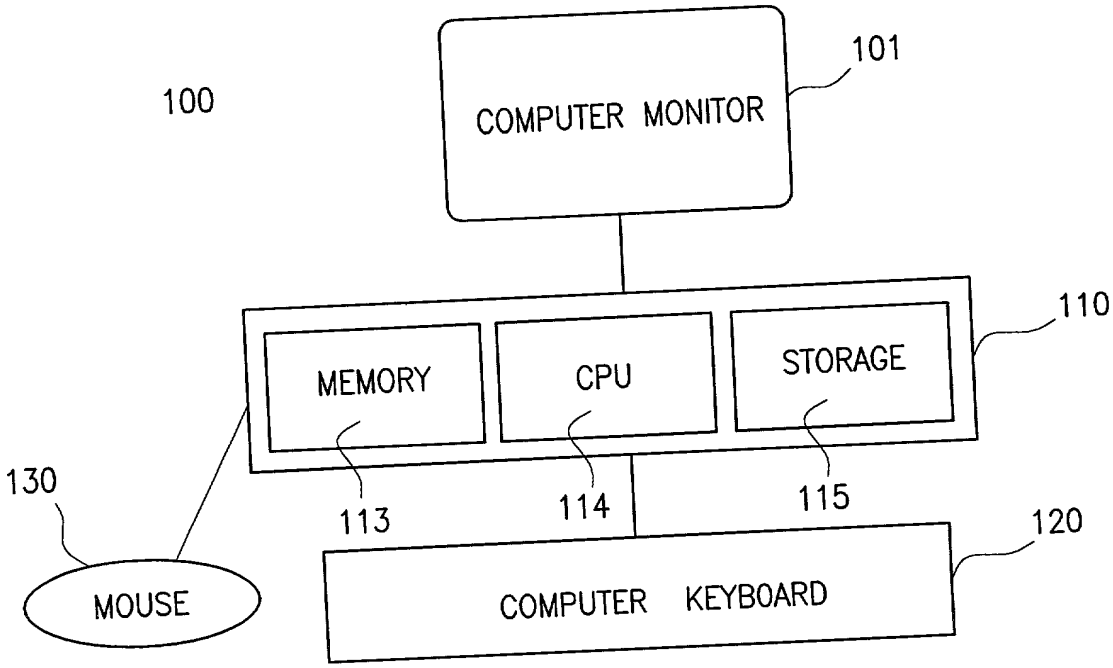
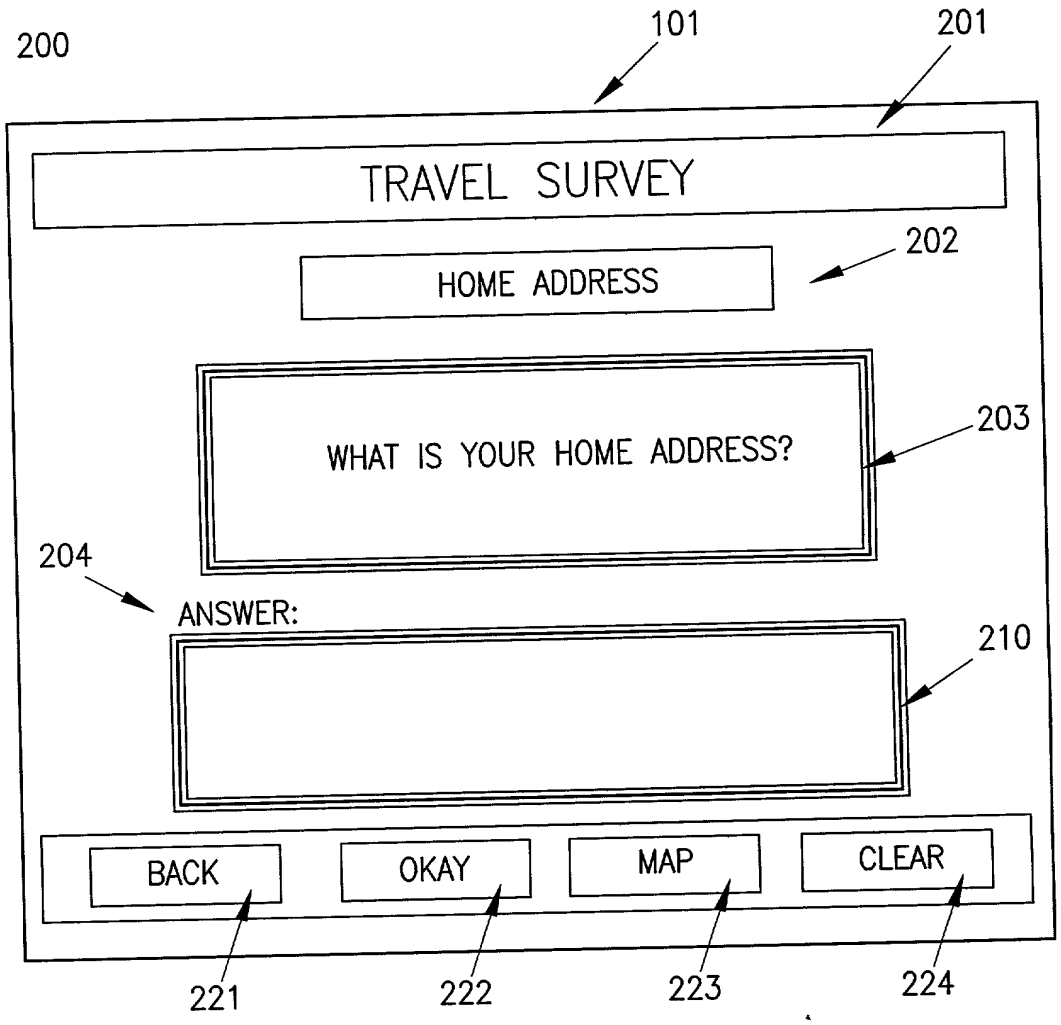
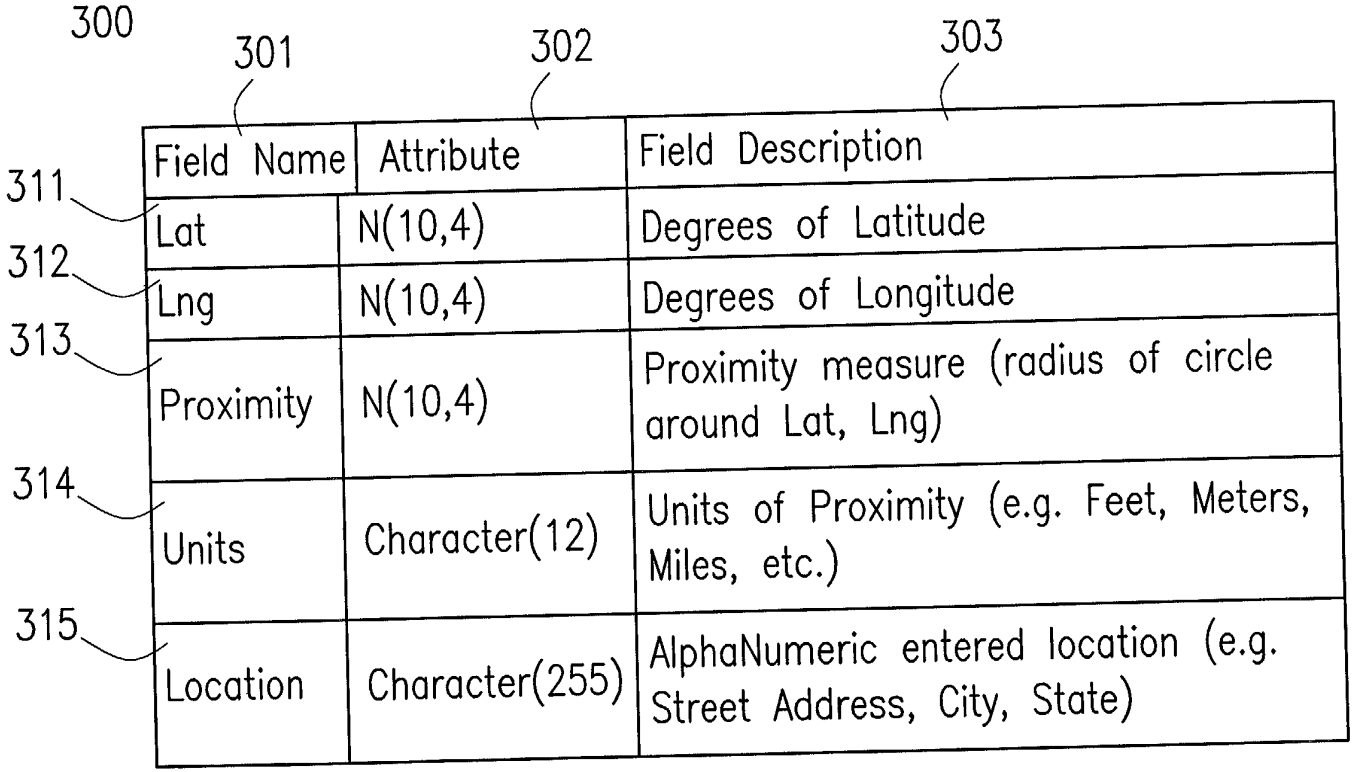

100
COMPUTER MONITOR
101
MEMORY
CPU
STORAGE
110
113
114
115
130
MOUSE
COMPUTER KEYBOARD
120

FIG. 2


200
101
201
TRAVEL SURVEY
202
HOME ADDRESS
WHAT IS YOUR HOME ADDRESS?
203
204
ANSWER:
210
BACK
OKAY
MAP
CLEAR
221
222
223
224

T0076092 9291T660



Field Name	Attribute	Field Description
Lat	N(10,4)	Degrees of Latitude
Lng	N(10,4)	Degrees of Longitude
Proximity	N(10,4)	Proximity measure (radius of circle around Lat, Lng)
Units	Character(12)	Units of Proximity (e.g. Feet, Meters, Miles, etc.)
Location	Character(255)	AlphaNumeric entered location (e.g. Street Address, City, State)

FIG. 3

T0076 "929T660

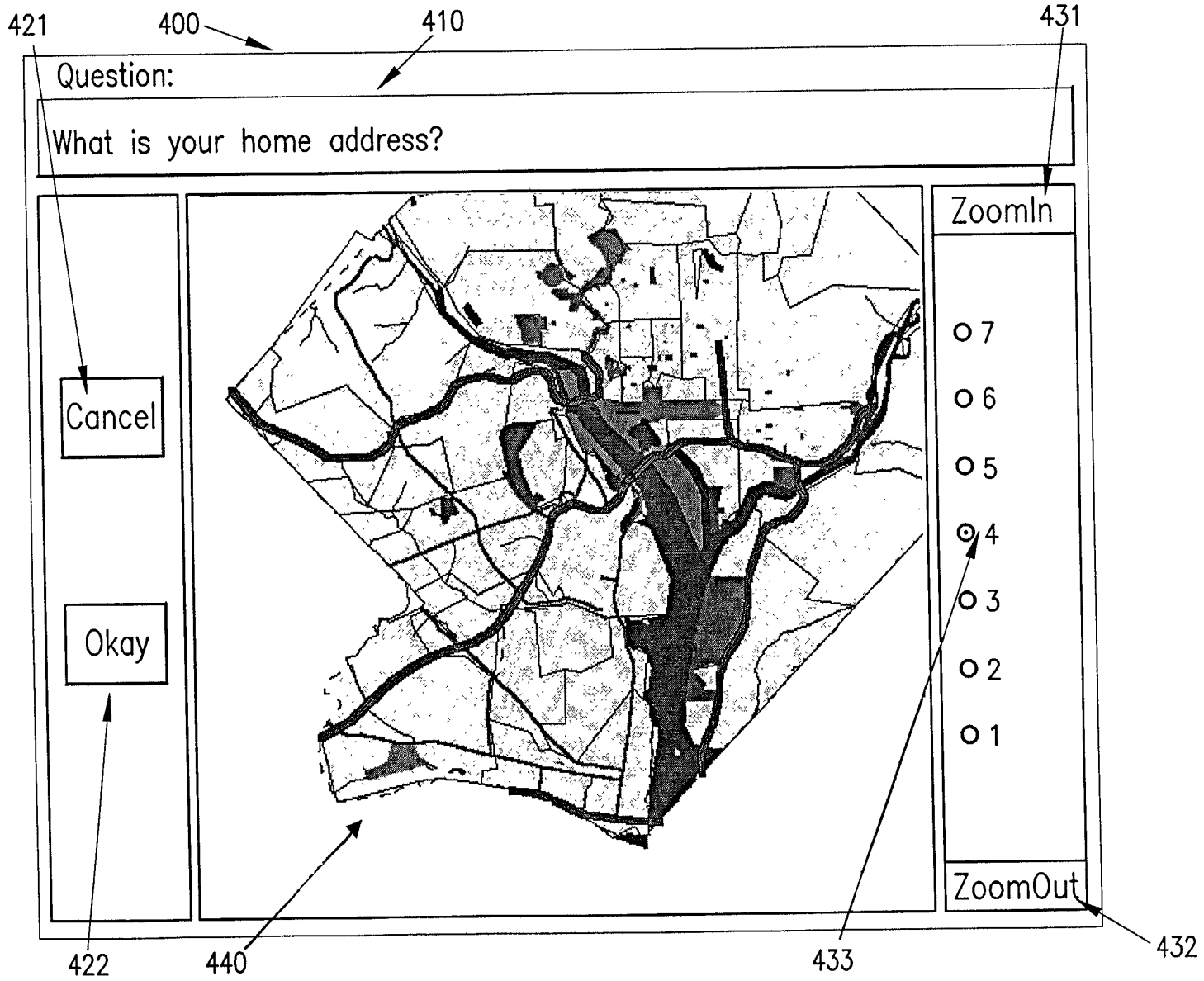


FIG. 4

TOP60 "92T660

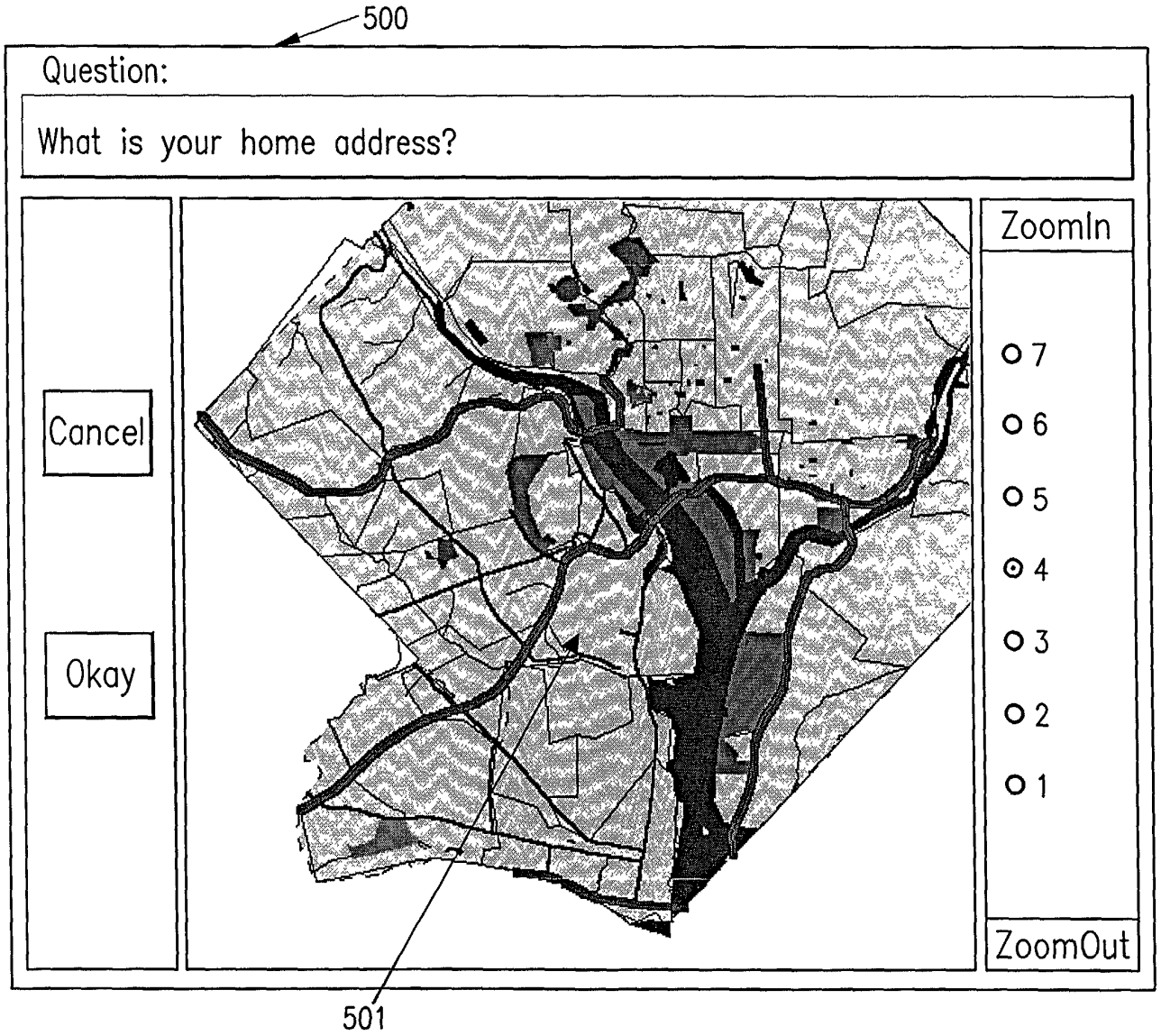


FIG. 5

T00T60" 929TT660

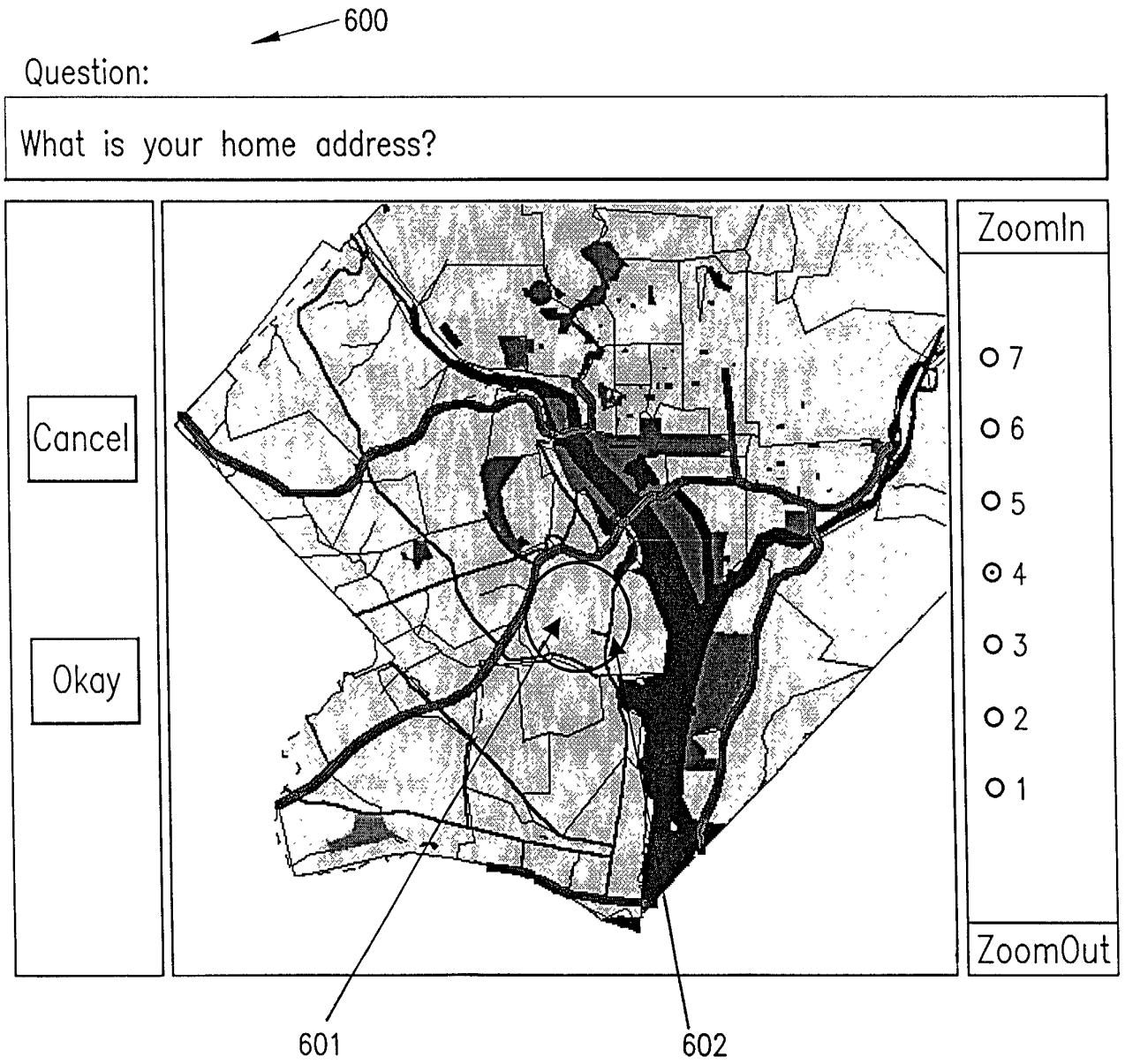


FIG. 6

FIG. 7

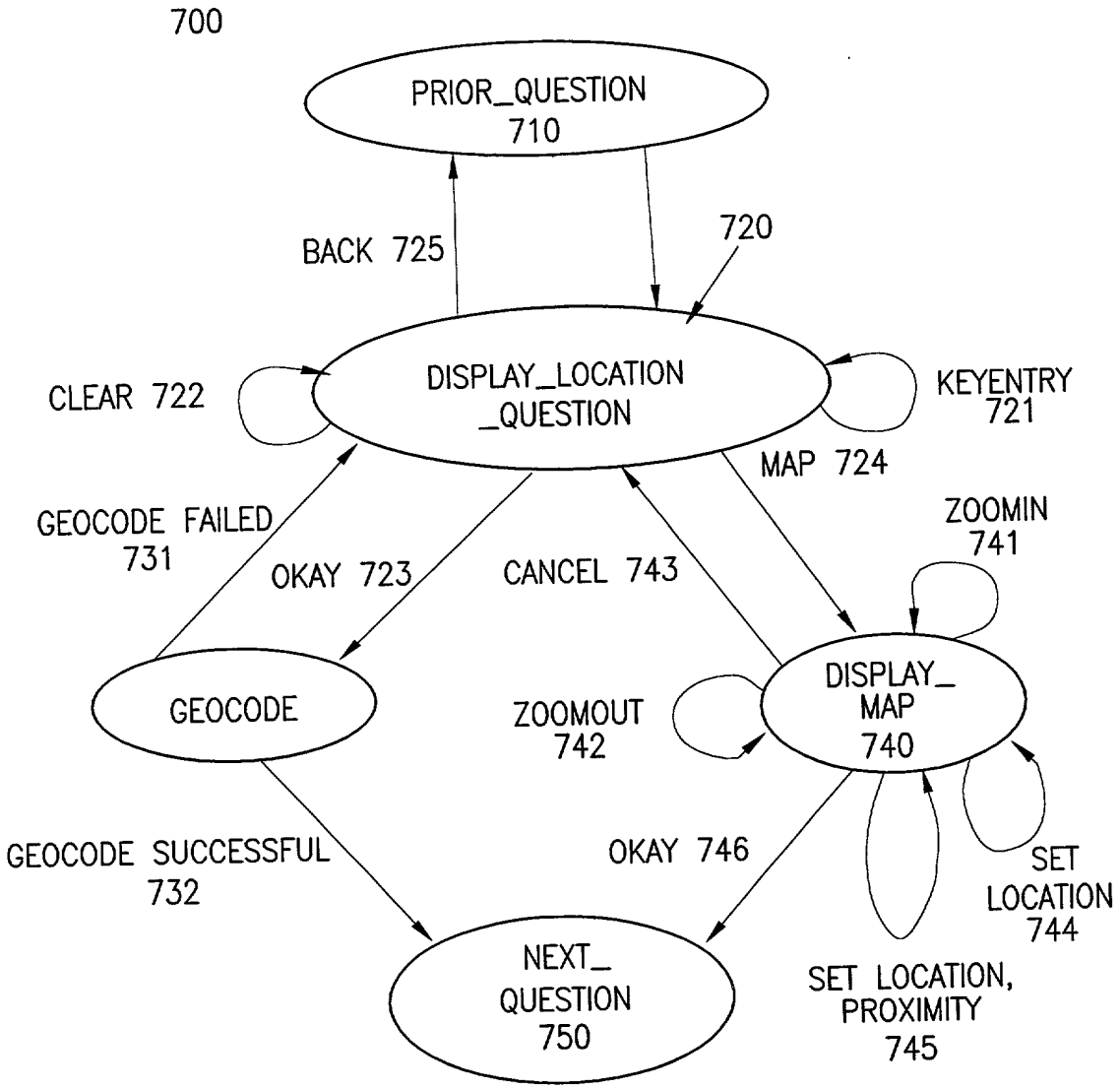

700
PRIOR_QUESTION
710
BACK 725
720
CLEAR 722
DISPLAY_LOCATION
_QUESTION
KEYENTRY
721
MAP 724
GEOCODE FAILED
731
OKAY 723
CANCEL 743
ZOOMIN
741
GEOCODE
ZOOMOUT
742
DISPLAY_
MAP
740
GEOCODE SUCCESSFUL
732
OKAY 746
SET
LOCATION
744
NEXT_
QUESTION
750
SET LOCATION,
PROXIMITY
745

FIG. 8

FIG. 8 (a)
FIG. 8 (b)
FIG. 8 (c)
FIG. 8 (d)

Fig. 8 (a)

800

State	Event	Processing
PRIOR_QUESTION		State=DISPLAY_LOCATION_QUESTION: Event=Initialize
DISPLAY_LOCATION_QUESTION	Initialize	Set GeoCode=(null,null,null,null,null) Display location question Set Location=null State=DISPLAY_LOCATION_QUESTION: Event=Wait_on_user_action
	Wait_on_user_action	Refresh Location Question Screen If Action=KeyEntry then Append KeyEntered to Location State=DISPLAY_LOCATION_QUESTION: Event=Wait_on_user_action Elself Action=Clear then Location=null State=DISPLAY_LOCATION_QUESTION: Event=Wait_on_user_action Elself Action=Okay

820

821

822

Fig. 8 (b)

		If Location=null then
		Display Message "No location entered–reenter"
		State=DISPLAY_LOCATION_QUESTION:
		Event=Wait_on_user_action
		Else
		State=GEOCODE: Event=GeoCode
		End If
		Elself Action=Map then
		State=DISPLAY_MAP: Event=Initialize
		Elself Action=BACK then
		State= PRIOR_QUESTION
		End If

GEOCODE
830
	GeoCode
	831
		Response=Call Geocode software for entry in Location variable
		If Response=Failed then
		Display Message"Illegal location specified–retry"
		State=DISPLAY_LOCATION_QUESTION: Event=Initialize
		Else
		GeoCode=(lat,lng,null,null,location)
		State=NEXT_QUESTION: Event=Display
		End If

T00T60"929T660

Fig. 8 (c)

DISPLAY_MAP 840	Initialize 841	Zoom=4 Lat=null: Lng=null: Proximity=Null: Units=Null State=DISPLAY_MAP: Event=Wait_on_user_action

	Wait_on_user_action
	842
		ReFresh Map
		If Action=ZoomOut then
		If Zoom> 1 then
		Zoom=Zoom −1
		State=DISPLAY_MAP: Event=Wait_on_user_action
		End If
		ElseIf Action=ZoomIn then
		If Zoom <7 then
		Zoom=Zoom +1
		State=DISPLAY_MAP: Event=Wait_on_user_action
		End If
		ElseIf Action=Cancel then
		State=DISPLAY_LOCATION_QUESTION: Event=Wait_on_user_action

Fig. 8 (d)

850		Elself Action=Location
		Set Lat,Lng from selected point on Screen
		State=DISPLAY_MAP: Event=Wait_on_user_action
		Elself Action=Proximity
		Set Lat,Lng from user selected point on Screen
		Set Proximity, Units from user input
		State=DISPLAY_MAP: Event=Wait_on_user_action
		Elself Action=Okay
		If (Lat,Lng)=(null,null) then
		Display Message "No map location selected–reenter"
		State=DISPLAY_MAP: Event=Wait_on_user_action
		Else
		GeoCode=(Lat,Lng,Proximity,Units,Location)
		State=NEXT_QUESTION: Event=Display
		End If
		End If

NEXT_QUESTION	Display	Display next question in the Computer Assisted Self Interview